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(Cotton manufacture) (Textile research)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R002065410005-8

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(Textile machinery) (Cotton muchinery)

(MIRA 8:1)

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1. Direkter T. NIKHBI.

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febolova).

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(Brick industry)

ZOLOTAREV., N. S.

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flow. Stek. i ker. 20 no.8:20-22 Ag '63. (MIRA 16:11)

1. Saratovskiy politekhnicheskiy institut.

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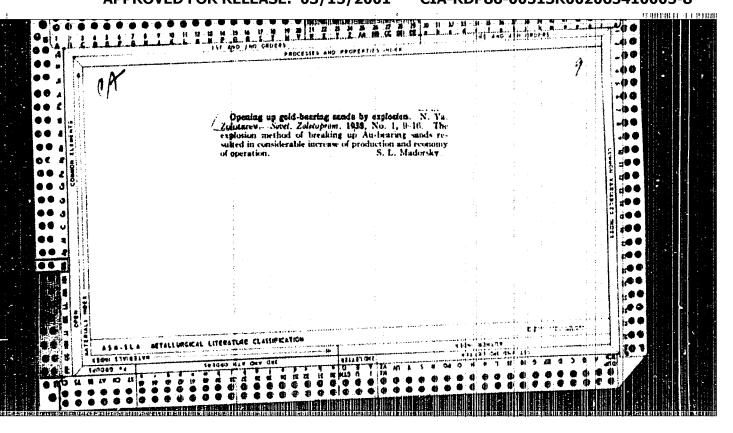
Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

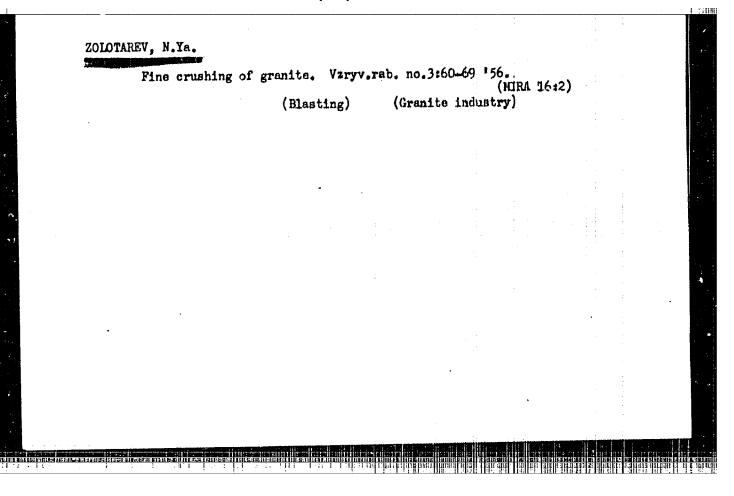
SO: SUM No. 556, 24 Jun 55

ZOLOTABEV, N. V.

1472 Voprosy teplotekhniches-Kogo rascheta pri vozvedenii zemlyanykh plotin metodom gidromekhaniza tsii v zimnikh usloviyakh. M., 1954. 12 s 2° sm. (M-Vo vyssh.
obrazovaniya SSSR. Mosk. ordena Trud. Krasnogo Znamen inzh-stroit. in-t im. V. V.
Krybysheva).110 ekz. B. ts.- (54-51611)

SO: KNIzhaya Letopis', Vol. 1, 1955





DUL'TSEV, P.P.; ZOLOTAREV, N.Ya.

Trench method of blasting. Vzryv.rab. no.3:91-107 '56.

(Blasting)

(Blasting)

1/2

Card

SOURCE COM: UR/0317/66/000/008/0024/0028 7, 09356-67 EWT(1)_ ACC NR: AP6030092 AUMIOR: Krivozub, D. (Brigadier general; Engineering forces; Candidate of technical sciences; Docent); Zolotarev, O. (Candidato of technical sciences; Docent) ORG: None TITLE: Contactless generators 15 SOURCE: Tekhnika i vooruzheniyo, no. 8, 1966, 24-28 TOPIC TAGS: clectric power engineering, electric generator ADSTRACT: After a general discussion of the well-known commutation deficiencies of d-c generators and various a-c commutator machines, the authors describe some types of electric generators designed without commutators, brushes, slip rings or any other similar contacts. The authors consider such types of "contactless" generators (including their excitation and voltage regulation circuits) from the standpoint of their possible use for small military mobile power stations, various motor vehicles and aircraft electrical systems. The first type described by the authors consists of a synchronous generator with an exciter mounted on the generator shaft and equipped with rotating rectifiers. The design and operation of the machine is outlined by using a cross-section drawing and a connection diagram. The generator is reliable in operation, can be used in explosive atmospheres and does not cause radio interferences. However, it is more complicated in design having rectifiers and additional windings. The second type of synchronous genera-

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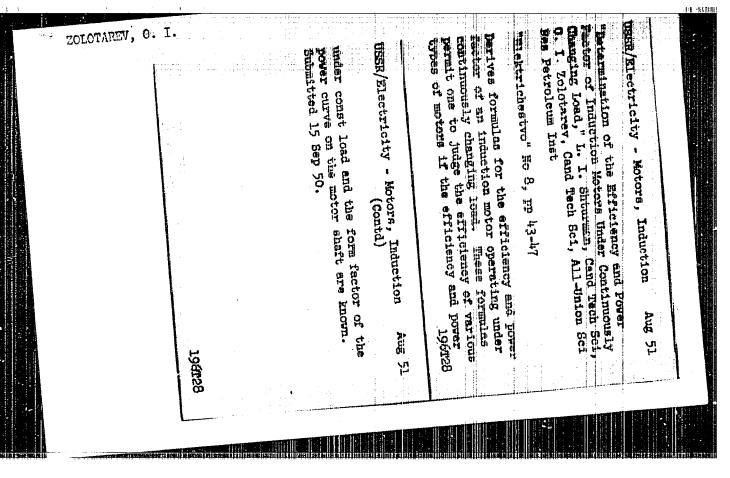
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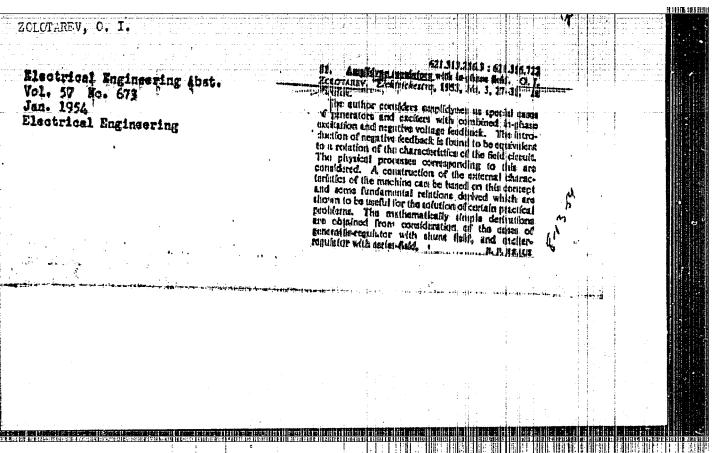
tor includes a rotor made of permanent magnet and enveloped by stator pole windings wound on two sleeves of a jaw clutch type. Its design is illustrated and the principles of its function are explained. In general, the generator is heavy and of a low power capacity. Its improved version provided with a rotating excitation winding is also described and shown in a cross-section projection. It is a compromising version because the rotating winding must be provided with sliding contacts. In order to eliminate sliding contacts the generator can be made with a fixed excitation winding. Two versions are described of which the first is equipped with a winding fastened to a core inside the rotor and the second represents a generator with a fixed winding placed symmeterically between the stator and rotor. Both versions are illustrated and the formation of their magnetic circuits is explained stressing that the first version is used for small generating capacities and the second one for larger types of generators. Such an enlarged model composed of three pole circuits is shown in a cross-section projection. Orig. art. has: 4 figures.

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	ating current density are f in conductor at which magn by flow of direct current , has maximum and minimum v 8 Mar 48.	USSR/Electricity (Contd)	impte to find simple rule to cross section where amplitudity has greatest value, which wide range of frequencies. In wide range of frequencies.	Conductors Currents, Electric Problem of Surface Effect," tarev, Cand Tech Sci, Mil Engyshev, 2 pp	R/Electricity
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ZOLOTAREV

AND P - 1471

Subject

: USSR/Electricity

Pub. 27 - 22/36 Card 1/1

Authors

: Zolotarev, O. I., Kand. of Tech. Sci.

Title

Amplidyne regulators with in-phase field (Discussion of the article by O. T. Zolotarev, Elektrichestvo,

Periodical: Elektrichestvo, 2, 68-69, F 1955

Abstract

: The author in reply to the criticism of his article in this issue of this journal, (see AID P - 1470) explains that objections raised against it concerned the first part, the "Statement of the problem", which introduced simplifications generally accepted in technical literature. He then gives detailed explanations, and concludes that if the objections raised were to be admitted, the result would not be an amplidyne regulator with in-phase field, but a d-c generator with combined excitation. The problem is

open for discussion. Four diagrams.

Institution: Submitted : No date

None

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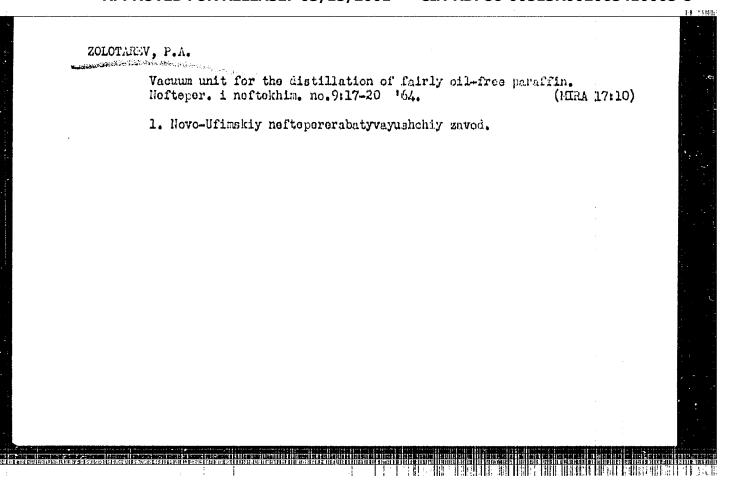
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source code: ur/oots/66/000/004/0044/004 ACC NRIAP6023018 (A) Zolotarev, P. (Colonel) AUTHOR: TITLE: As quickly as possible, using own equipment [Decontamination exercise] ORG: None SOURCE: Voyennyy vestnik, no. 4, 1966, 44-47 TOPIC TAGS: CBR decontamination kit, military training, military personnel, CBR ABSTRACT: Training small units to eradicate CBR contamination is one of the most protective equipment important of assignments. A typical exercise requires troops to decontaminate equipment (tanks, tractors and trucks) using the DKV (armaments and equipment CBR equipment (tenks, tractors and trucks) using the DAY (armements and equipment if decontamination kit) which can decontaminate 78 large pieces of equipment if chemical and bacteriological decontamination is required, and 26 units if radioactive decontamination is needed. Three drills each two hours long, are recommended for training the men to use the DKV on their own. The drills are described in detail, and general questions dealing with the properties of nuclear and chemical weapons, permissible contamination norms for various objects, and safety measures during decontamination, are taken up. An exercise is described in which a wooded area in which a tank company is deployed, contaminated by a simulated nuclear blast, is Card 1/2

evacuated and the	tanks decon	taminated	by own	DKV e	quipment.	Orig.	art.	has:		
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Obtaining high-viscosity residual Jubricants. Nefterer. i nefte-khim. no.10:14-17 '64. (MIRA 17:12)

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KLEYMENOV, V.V., inzh.; ZOLOTAREV, P.A., kand. tekhn. nauk; NAZIKYAN,
A.G., kand. tekhn. nauk

Study of transient processes in the traction motor networks
of main line electric locomotives. Elektrotekhnika 36 no.8:
35-37 Ag *64.

(MIRA 17:9)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065410005-8"

ZOLOTAREV, P.A. Selecting the basic parameters of the traction motors for a.c. locomotives. Sbor. nauch. trud. EINII 2:116-131 '62. (MIRA 16:8)

(Electric railway motors)

BOCHAROV, Vasiliy Ivanovich; ZOLOTAREV, Petr Alekseyevich;
NAKHODKIN, M.D., kand. tekhn. nauk, red.; RHITHOVA, N.A.,
tekhn. red.

[Traction motors of a.c. electric locomotives] Tiagovye dvigateli elektrovozov peremennogo toka. Moskva, Transzheldoriziat, 1962. 94 p. (MIRA 15:6)

(Electric railway motors)

ZOLOTAREV, P.A., inzh. (Novocherkassk); POSKROBKO, A.A., inzh.

(Novocherkassk); SITNIK, N.Kh., kand.tekhn.nauk (Novocherkassk)

Selecting the method of voltage regulation on inc.electric locomotives. Zhel.dor.transp. 44 no.1:38-43 Ja '62.

(MIRA 14:12)

(Electric locomotives)

(Voltage regulators)

ZOLOTAREV, Petr Alekseyevich; ERATOLYUBOV, Vsevolod Borisovich

Traction motors for rectifying locomotives with a 1000 volt rating.
Izv.vys.ucheb.zav.; elektromekh. 5 no.1;47-54 '62. (MIRA 15:2)

1. Nachal'nik laboratorii Novocherkasskogo nauchno-issledovatel'skogo instituta elektrovozostroyeniya (for Zolotarev). 2. Rukovoditel' gruppy Novocherkasskogo nauchno-issledovatel'skogo instituta elektrovozostroyeniya (for Bratolyubov).

(Electric railway motors)

ZOLOTAREV, P.A., inzh.; GREBENKIN, V.Z., inzh.

Wear resistance of the collectors of electric traction motors.

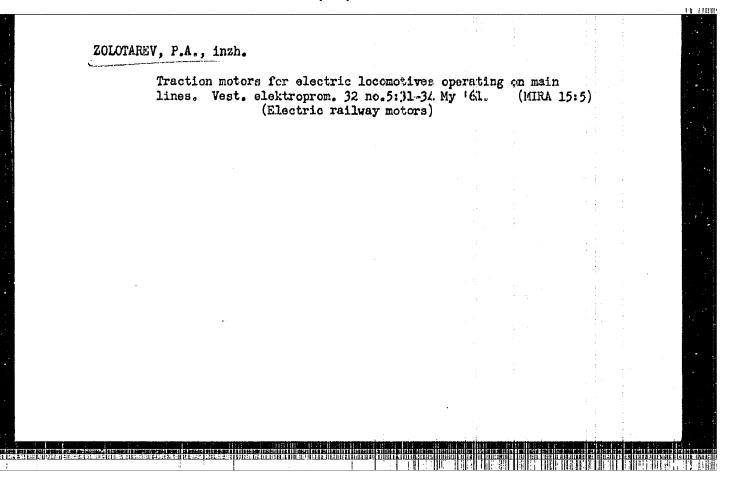
Vest. elektroprom. 34 no.1:43-46 Ja '63. (MIRA 16:1)

(Electric railway motors) (Electric locomotives)

ZOLOTAREV, P.A., VASILENKO, G.V.

Improving the traction properties of N8 and VI23 electric locomotives. Zhel.dor.transp. 42 nc.8:21-22 Ag 160. (MIRA 13:8)

1. Nachal'nik otdela elektricheskikh mashin konstruktorskogo byuro Novocherkasskogo zavoda (for Zolotarev). 2. Rukovoditel' gruppy elektricheskikh mashin konstruktorskogo byuro Novocherkasskogo zavoda (for Vasilenko). (Electric locomotives)



SOV/144-59-5-9/14

AUTHOR: Zolotarev, P.A., Engineer

Blectric

TTTLE:

Methods of Improving the Commutation of/Traction Motors

with Pulsating Current

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektro-

mekhanika, 1959, Nr 5, pp 74 - 91 (USSR)

ARSTRACT: It is still difficult to ensure satisfactory commutation in the electric traction motors of rectifier electric locomotives, and published information on this subject is incomplete and often contradictory. This article at capts to system-atise the various methods of improving the commutation of such motors. A d.c. traction motor with an unlaminated stator system is taken as the reference type with which others are compared. The degree of pulsation in the current is assumed to be such as is normally met in rectifier locomotives. Measures that may be taken to improve commutation are divided into two groups which are considered in turn, namely: methods involving special construction of particular parts of the motor; and methods involving special circuits. Under the first healing, various components are considered, as follows. It is important Card 1/10 to choose the right grade of brush, and a high value of

Electric 59-5-9/14

Methods of Improving the Commutation of Traction Motors with Pulsating Current

transient voltage drop is desirable. Other things being equal, the out-of-balance e.m.f. that can be tolerated is proportional to the increase in transient voltage drop of the brushes. In order to increase the resistance to commutation currents caused by uncompensated e.m.f's, the brushes should consist of two or three parts. In this way, the tolerable out-of-balance e.m.f. can be increased by 15 - 20%. The shape of the interpole shoes is important. Figure 2 illustrates calculated curves of field shape under the interpole of traction motor type NB-412. It has been found that quite a small change in the shape of the shoe, illustrated by a dotted line, causes an appreciable reduction in the out-of-balance e.m.f. that can be tolerated; in the particular case considered the change was about 10%. The air gap under the interpole should be

Card 2/10 made as long as possible in order to reduce the reactive

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e.m.f. and pulsation of the flux caused by the rotor teeth. Normally the air-gap length should be equal to or greater than three-quarters of the slot width. The separation between the pole and the frame should also be as long as possible, and the non-magnetic spacer should be of nonmetallic material. In order to reduce interaction between the field of the main pole and that of the interpole in the commutation zone, the magnetic overlap should not be large and the gap at the edges of the main pole should be about twice as long as in the middle. In traction motors supplied by pulsating current it is particularly important to establish and observe close manufacturing tolerances on dimensions. Table 1 gives a list of permissible tolerances on a number of important dimensions on such motors. The armature winding should be so designed that the reactive e.m.f. is as small as possible, and the coils in a given slot should be of equal inductance. The necessary conditions are best assured if the number of commutator

Card 3/10 bars per slot is small and the conductors are laid flat.

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Methods of Improving the Commutation of Traction Motors with Pulsating Current

The relationship between the reactive e.m.f. and the slot construction for a given motor, other things being equal, is given in Table 2. The type of winting should be one in which the self- and mutual-inductions are small; the influence of the type of winding on the magnitude of the reactive e.m.f. is indicated in Table 3. Attention should be paid to the design of the core of the main pole; by using laminations of appropriate thickness it is possible to effect some control over the eddy currents, thereby adjusting the angle of magnetic retardation of the armature reaction flux. Data about this means of adjustment appear in Table 4. Corresponding information for the interpole is given in Table 5. Oscillograms of the current in the interpole winding and of the e.m.f. in the frame are given in Figure 3 where Figure 3a relates to a solid pole, Card 4/10 Figure 36 a laminated pole and Figure 38 a laminated stator.

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In making these tests the armature and main pole windings were disconnected. It will be seen that modification in the construction of individual parts of the magnetic circuit of the interpole can affect: the magnitude and direction of the vector of the alternating component of the m.m.f. of the interpole in the commutation zone. Table 6 shows the influence of the pole construction on the out-of-balance e.m.f's, giving calculated values of the latter for various combinations of main and interpole construction on a given motor. Data about the influence of a compensating winding on the out-of-balance e.m.f. with various types of magnetic circuit construction for a particular motor are given in Table 7. It will be seen that inclusion of a compensating winding somewhat reduces the out-ofbalance e.m.f. but its main advantage is improvement in the potential conditions on the commutator and the possibility that it affords of making the machine lighter. Such windings are, however, somewhat difficult to manufacture and repair. The use of special circuits to improve comm-Card 5/10 utation is then considered. The first circuit considered

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is that shown in Figure 4 in which the field winding is shunted by an active resistance. This circuit is used in locomotives Type NO and N60. The use of a diverter of this kind reduces the reactive e.m.f. but if the locomotive speed is controlled by weakening the field of the main pole the value of the diverter needs consideration. It should be such as to reduce the stray losses due to pulsation of the main flux and to limit sufficiently the transformer-e.m.f. in the short-circuited armature turns. Eq (5) may be used to determine the value of the transformer-e.m.f., the values of factors entering into this equation being given in the graphs of Figures 5 and 6. Permissible values of the out-of-balance e.m.f. when field-weakening is used may be determined from Figure 7 and Table 8. The circuit shown in Figure 8, in which the field winding is shunted by an inductance, may be used to ensure

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> mutual compensation of the out-of-balance and transformere.m.f.'s during the field-weakening. In this circuit a constant resistive shunt controls the phase of the transformer-e.m.f. The inductance is connected in series with the field-weakening resistance so that the adjustment is maintained when the field is weakened. When such inductive shunting is used the transformer-e.m.f. is less than half its value with the full field. If the inductance is increased in order to increase the alternating component of the current in the field winding the construction of the shunts is much heavier and it is difficult to raintain the phase adjustment under different operating conditions. The relationship between the field winding inductance and the load with allowance for the demagnetising effect of eddy currents and saturation may be determined from Eq (7) and then the shunt parameters may be calculated. Experience shows that this circuit somewhat reduces the our-of-balance e.m.f.'s and improves the operation of a motor on pulsating current. The interpole windings may be shunted inductively,

Card 7/10 as shown in Figure 9, to rotate the vector of the altern-

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ating component of the interpole winding so that it leads the armature current. A capacitor is used to prevent the flow of d.c. A disadvantage of this circuit is that the resistance of the interpole windings must be high. A variant of the circuit given in Figure 9 is shown in Figure 10 in which the armature winding is shunted by a capacitor and inductance. This causes the alternating component of the armature current to lag relative to that of the interpoles. A disadvantage of this circuit is that it is difficult to ensure stable phase-adjustment with load variations. In the further variant shown in Figure 11 both the interpole and armature windings are shunted. The graph of Figure 12 shows the relationship between the degree of sparking and the value of the pulsating current for this circuit and also for a normal circuit as determined on the test bed. Card 8/10 During the tests about half of the alternating component

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Methods of Improving the Commutation of Traction Motors with Pulsating Current

of the current passed through the shunt. The inductance of the armature winding as a function of load with allowance for the demagnetisating effect_of eddy currents and saturation, may be determined from Eq (9). A similar determination for the interpole is given by Eqs (11) -(13). An effective way of improving the operation of traction motors is to increase the number of phases of the rectifier. Evidence is given in Table 9, from which it follows that, compared with the ordinary circuit, even three-phase rectification cuts the current pulsation by a third, improving the commutation and reducing the heating of the motor winding; there is also a considerable reduction in the pulsation of the rectifier voltage. A threephase rectifier circuit with single-phase supply to the
locomotive is shown in Figure 15. With this circuit a phase-converter can also be used to compensate reactive power. Conditions may also be improved by reducing the system frequency, and information is given in Table 10 about the frequencies used in different countries. Table

Card 9/10 ll concerns traction motors used on rectifier locomotives

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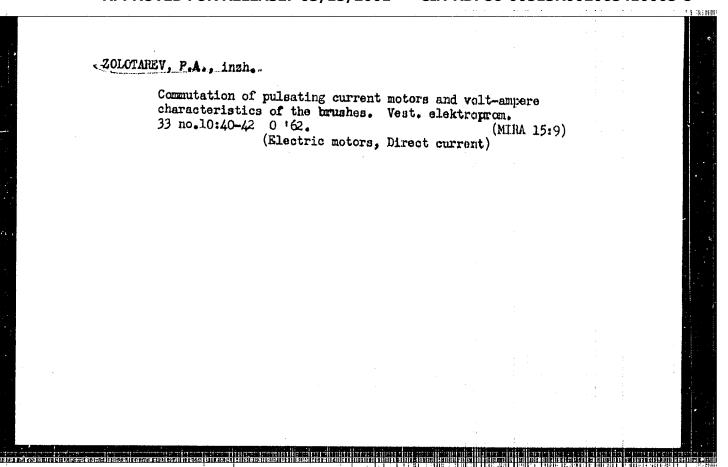
Methods of Improving the Commutation of Traction Motors with Pulsating Current

made in a number of countries. It should be noted that the American locomotives have comparatively heavy traction motors with a 25 c/s supply. The French locomovives use comparatively light motors and tend to adopt special measures to ensure satisfactory commutation. There are 15 figures, 11 tables and 2 Soviet references.

ASSOCIATION: Novocherkasskiy elektrovozostroitel'nyy zavod (Novocherkassk Electric Locomotive Manufacturing Works)

SUBLITTED: March 21st, 1959.

Card 10/10



ZOLOTAREV. P.A., inzh.

Determining the region of sparkless commutation by calculations.

Vest.elektropron. 30 no.3:39-41 Mr '59. (MIRA 12:4)

(Electric machinery--Direct current)

ZOLOTARBY, P.A., inzh. (g. Hovocherkasek); EGCHAROV, V.I., inzh. (g. Novocherkasek)

IB-12M traction motor of an a.c. M50-series electric locomotive.

Elek, i tepl. tiaga 4 no. 12:19-22 D '60. (NIRA 14:1)

(Blectric railway meters)

ZOLOTAREV, P.A., inzh.

What kind of electric traction motor is needed for rectifiertype electric locomotives? Zhel.dor.transp. 42 no.12:45-46 D '60. (MURA 13:12)

1. Nachal'nik otdela elektricheskikh mashin Spetsial'nogo konstruktorskogo byuro Novocherkasskogo elektrovozostroitel'nogo zavoda, g. Novocherkassk.

(Electric locomovives)

Zolctarev, P.A. Engineer AUTHOR:

SOV/144-58-3-6/18

TITIE:

On the Commutation of DC Traction Motors Fed From

Ionic Rectifiers (O kommutatsii tyagovykh dvigateley

postoyannogo toka elektrovozov s ionnymi vypryamitelyami)

Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika, PERIODICAL:

1958, Nr 8, pp 54 - 65 (USSR)

ABSTRACT: Running of IC traction motors by means of current supplied from full-wave rectifiers complicates the commutation. In this paper, an attempt is made to analyse this problem and to determine certain criteria for DC traction motors which are intended for electric locomotives operating on AC rectified by means of loric rectifiers (ignitrons). The basic circuit of a traction motor, which is fed from full-wave rectifiers, is given in Figure 1; in Figure 2 typical oscillograms are reproduced of the oscillations of the currents and voltages in the individual elements of such a circuit. Investigations are carried out for the Soviet traction motors, DPE-400 and NB-406. On the basis of the obtained results, the following conclusions are arrived at: 1) the reactance e.m.f. caused by the

Cardl/3 alternating component of the current is not compensated

SOV/144-58-8-6/18
On the Commutation of DC Traction Motors Fed From Ionic Rectifiers

and increases as a result of the e.m.f. induced by the total armature flux and by the supplementary poles; 2) from the point of view of sparking, the average value of the nor-compansated reactance e.m.f. during commutation, caused by the AC component, is 0.6 V for motors of current designs; 3) the absolute value of the reactance e.m.f., the speed, the voltage conditions, the magnitude of the current pulsation and the pulsation of the voltages between adjacent commutator laminations have little influence on commutation for variations within the limits of the operating characteristics of the motor; 4) when designing DC traction motors for electric locomotives fed with ionic amplifiers, it is necessary to pay particular attention to the ratio of the magnitudes of the current pulsations in the resutance e.m.f. of the motor. For ensuring reliable operation of highly stressed motors, it is recessary to adopt special measures for improving commutation; 5) the method of investigation applied in

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On the Commutation of DC Traction Motors Fed From Ionic Rectifiers

this paper requires further improvement but, in the first approximation, it yields results which are in good agreement with experimental data.

good agreement with experimental data.

There are 11 figures, 2 tables and 5 references, 4 of which are Soviet and 1 German which are Soviet and 1 German

ASSOCIATION: Novocherkasskiy elektrovozostroitel nyy zavod (Novocherkassk Electric Locomotive Works)

SUBMITTED: April 5, 1958

Card 3/3

SOV/110-59-3-10/25

AUTHOR:

Zolotarev, P.A., Engineer

TITIE:

A Theoretical Method of Determining the Region of Sparkless Commutation (Raschetnyy metod opredeleniya

oblasti bezyskrovoy kommutatsii)

PERIODICAL: Vestnik Elektropromyshlennosti, 1959, Nr 3, pp 39-41 (USSR)

ABSTRACT: Experimental methods of determining the zone of sparkless commutation sometimes cannot be used over the entire load range particularly on traction motors when field weakening is used. The method of calculating the zone of sparkless commutation that is proposed is based on an analysis of commutating tests on traction motors. Commutation sparking is interpreted in the classical way as resulting from interruption of the additional current in the commutating section that results from uncompensated emf's in the circuit. It is first stated that a limiting value of the uncompensated emf exists and is a constant, though different authors give different values for it. In any particular machine the uncompensated emf due to different causes is also a constant characteristic of the particular machine. If the machine commutates

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A Theoretical Method of Determining the Region of Sparkless Commutation

satisfactorily there is some reserve between the two values. Therefore, the width of the zone of sparkless commutation is governed by the amount of this reserve and if this is determined experimentally for different types of machine, curves of the region of sparkless commutation can be calculated. The magnitude of this reserve as a function of current was determined for three types of traction motor, the main data of which are tabulated. During the investigations the following were varied: the field weakening of traction motors; the grade of brushes; the shape of the interpole tips; the commutator voltage; the brush polarity and others. Curves of the reserve additional voltage as function of current shows that although the motors tested were of varying different construction and output the reserve voltage is practically constant at 0.35 V over the range of 50-150% rated load. Minor changes in the value of the additional voltage that results from field weakening,

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SOV/110-59-3-10/25

A Theoretical Method of Determining the Region of Sparkless Commutation

brush grade alteration and alteration of interpole end piece shape are given in Fig.1, 2 and 3. There are 4 figures and 1 table.

SUBMITTED: 11th August 1958

Card 3/3

ZoLotarer, P.A

110-2-7/22

AUTHORS:

Zolotarev, P.A. (Engineer), Kozorezov, M.A. (Engineer) &

Sitnik, N.Kh. (Engineer)

TITLE:

The drive of auxiliary equipment in a.c. electric locomotives. (Privod vspomogatel'nykh mekhanizmov elektrovozov peremennogo toka.) No.2, pp.24-28. (USSR)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958,

ABSTRACT:

With the increasing development of 50 c/s locomotives, more attention must be paid to the drive of auxiliaries. The main auxiliaries are compressors, fans, pumps and low voltage d.c. generators, all being constant-speed and-torque machines except the compressor. In addition to the usual requirements, such as reliability and simplicity of servicing, they must withstand ambient temperatures ranging between +40 and -50°C. and supply-voltage variations of +10 and -30%. The starting torque required of the driving motor of a compressor type 3-500 and the ambient temperature are related in Fig.1, based on the experimental data by Engineer G.G. Rekus of the Moscow Higher Technical College. Auxiliary equipment is supplied from a special single-phase winding on the locomotive power transformer. The first Soviet mainline a.c. 50 c/s locomotive type OP-22, constructed in 1938, used 3-phase induction motors supplied by a synchronous phase-splitter for auxiliary drive. In 1954 the Novocherkassk Blectric Locomotive Works produced 50 c/s locomotives type HO in which the auxiliaries are driven by capacitor-start induction notors. Abroad, extensive use is

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The drive of auxiliary equipment in a.c. electric locomotives. 110-2-7/22

recommended, particularly for rectifier locomotives in which the power-factor can be improved by installing synchronous compensators

on the locomotive and combining the phase-splitter and compensator in one machine. A series d.c. motor supplied through a rectifier or alternatively a single-phase commutator motor is advised for the compressor drive. There are 5 figures, 3 literature references

SUBMITTED:

July, 1, 1957

ASSOCIATION: The Novocherkassk Electric Locomotive Works (Novocherkasskiy

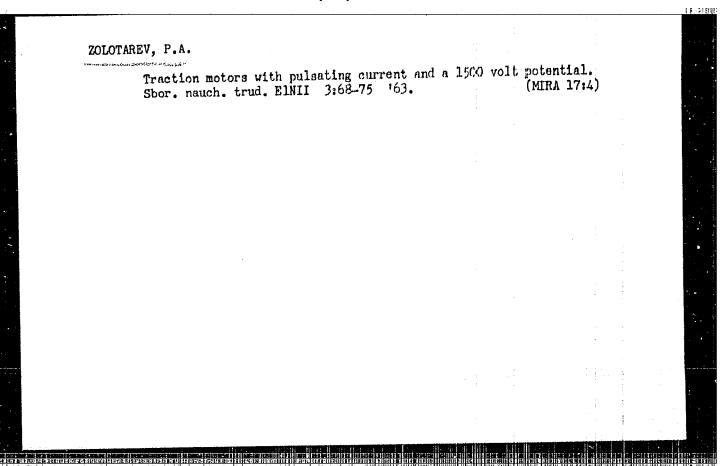
elektrovožostroitelinyy zavod)

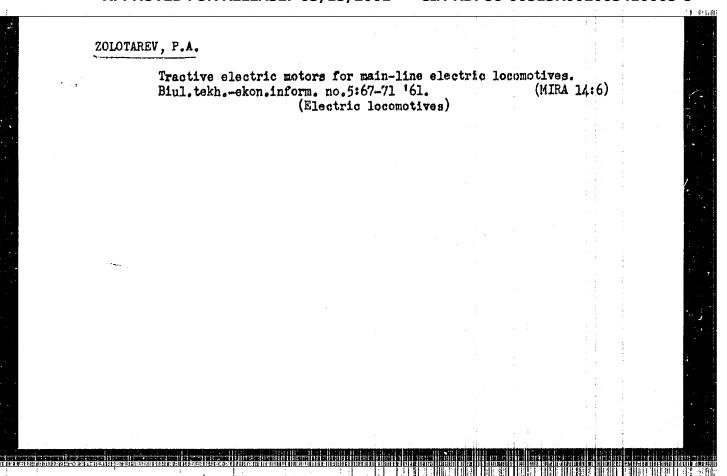
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Library of Congress.

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ZOLOTAREV, Petr Alekseyevich, kand. tekhn. nauk

Regulation of the excitation current of electric traction motors with switching of a bank of coils with opposite polarity. Izv. vys. ucheb. zav.; elektromekh. 8 no.1:115-118 '65. (MIRA 18:3)

1. Nachal'nik konstruktorskogo otdela elektricheskikh mashin Vsesoyuznogo nauchno-issledovatel'skogo i projektnokonstruktorskogo instituta elektrovozostrojeniya.

ZOLOTAREV, P.A., inzh.-konstruktor; MOZOREZOV, M.A., inzh.-konstruktor; MELIKHOV, V.L., inzh.-konstruktor; NOVOGRENKO, N.M., inzh.-konstruktor; SVERDLOV, V.Ya., inzh.-konstruktor; Tishkanov, B.A., inzh.-konstruktor; SHAPIRO, I.L., inzh.-konstruktor

The M81 eight-axle a.c. locomotive. Elek.i tepl.tiaga 7 no.2:20-25 F '63. (MIRA 16:2) (Electric locomotives)

ZOLOTAREV, P.A., inzh.-konstruktor; KOZOREZOV, M.A., inzh.-konstruktor;

MELIKHOV, V.L., inzh.-konstruktor; NOVOGRENKO, N.M., inzh.konstruktor; SVERDLOV, V.Ya., inzh.-konstruktor; TUSHKANOV, B.A.,
inzh.-konstruktor; SHAPIRO, I.L., inzh.-konstruktor

VL80 eight-axle a.c. locomotive. Elek. i tepl. tiaga 7 no.4: 24-28 Ap 463. (MIRA 16:5)

1. Novocherkasskiy elektrovozostroitel'nyy zavod i Novocherkasskiy nauchno-issledovatel'skiy institut elektrovozostroyehiya.

(Electric locomotives)

ALIKIN, R.I.; GORDIYENKO, P.I.; BESPROZVANNYY, I.G.; ZHIBTSOV, P.P.;

ZOLOTAREY, P.A.; ZUSMANOVSKAYA, L.L.; IBRAGIMOV, K.G.; KOZOREZOV,

M.A.; KOKOREV, A.T.; KUPRIANOV, YU.V.; KUROCHKA, A.L., kand.
tekhn. nauk; LITVINOVA, L.M.; LOZANOVSKIY, A.L., kand. tekhn.
nauk; MAVDRIKOV, F.I.; MAKHAN'KOV, L.V.; PUKALOV, V.I.; RAYLYAN,
A.F.; SVERDLOV, V.YA.; SKLYAROV, B.S.; SOLOV'YEV, K.M., kand.
tekhn. nauk; STUKALKIN, A.N.; SUROVIKOV, A.A.; TIKHONOV, N.G.;
SHTEPENKO, P.K.; YANOV, V.P.

[VL80 electric locomotive.] Electrovoz VA80. Novocherkassk. Nauchnoissledovatel'skii institut elektrovozostroeniia. Sbornik nauchnykh trudov, vol. 5) (MIRA 18:5)

ZOLOTAREV, P.A.

Rogidual high-vincosity oils. Nofterer. 1 noftskhim. no.5:
3-6 '65.

(MIRA 18:7)

ZOLOTAREV, Petr Alekseyevich, insh.

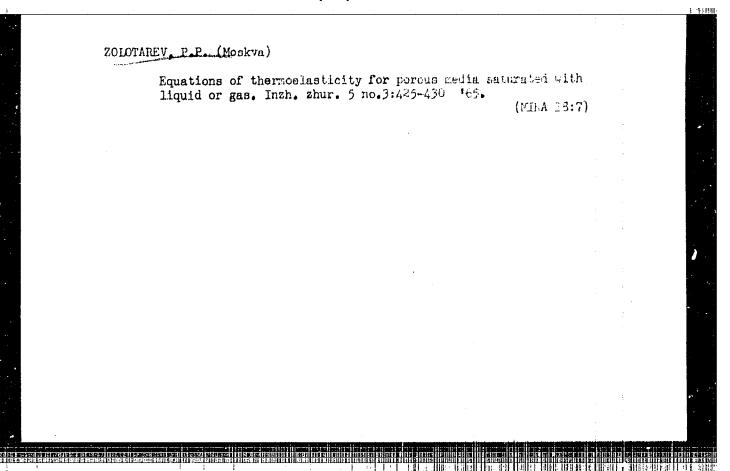
Some problems concerning the design of electric locomotives. Izv. vys. ucheb. zav.; elektromekh. 5 no.6:670-678 162. (MIRA 15:10)

I. Nachal'nik konstruktorskogo otdela elektricheskikh mashin Novocherkasskogo nauchno-issledovatel'skogo instituta elektrovozostroyeniya.

(Electric locomotives)

ZOLOTAREV, P.P. (Moskva)

Propagation of weak porturbances in mixtures. Inv. AN SSSR
Mekh. 1 mashinostr. no.42178-180 t64 (MIRA 1728)



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	ZOLOTAI	REV, P.P.	; NIKOLA													
		Distrib Trudy V	oution of NII no.4) pressi 2:112-1	ire 130	waves '65.	in roo	ke	satur	al;ed	with (MIHA	fluid 18:5	;			
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"Fropagation of accoustic waves in porcus beds saturated with gas or oil" report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

Equations of heat conduction in netercements continuums. Inzh.
zhur. 3 no.3:560-562 '63. (MIRA 16:10)

1. Institut mekhaniki AN SSSR.
(Heat—Conduction)

Propagation of gas in fissured rocks. FMTF no.5:135-139 S-0 (62. (MTRA 16:1)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel skiy institut. (Gas flow) (Rocks---Permeability)

ZHELTOV, Yu.P.; ZOLOTAREV, P.P.

Linearizing equations of gasflow in fractured rocks. Nauch.-tekh. sbor. po dob. nefti. no.20:17-20 153. (MIRA 17:6)

(BP)

ACCESSION NR: APho26961

\$/0258/64/004/001/0111/0120

AUTHOR: Zolotarev, P. P. (Moscow)

TITLE: Sound wave propagation in a gas-saturated porous medium with rigid frame

SOURCE: Inzhenermy zhurnal, v. 4, no. 1, 1964, 111-120

TOPIC TAGS: sound wave propagation, gas-saturated porous medium, rigid frame, parallel pipes, constant cross section, damping coefficient, damping curve, dispersion curve, conservation of mass, conservation of impulse, two-phase medium

ABSTRACT: For studying sound wave propagation in a gas-saturated porous medium the author uses a method different from the usual representation of a porous medium as a system of parallel pipes with rigid walls and constant cross section. He considers the medium as solid but two-phased, and for this he writes the averaged equations of conservation and of state. The porous frame is assumed absolutely rigid but subject to the influence of temperature. The author discards second-order terms to get the linearized equations of conservation of mass, impulse, and energy. He assumes the heat exchange to be proportional to the

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ACCESSION NR: AP4026961

difference between the temperatures of the gas and the frame. It is assumed that the coefficient of heat exchange must be determined experimentally. To the previous equations the author adds the equation of state of the gas. The equations he derives are suitable only when the dimensions of a grain are much less than the wave length. The damping and dispersion curves, obtained here under certain simplified assumptions, are compared with the actual ones for the case of a slit—shaped channel, and the limits of applicability for this assumption in computing the damping coefficient are found. Orig. art. has: 3 figures and 52 formulas.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics, AN SSSR)

SUBMITTED: 28Apr63

DATE ACQ: 15Apr64

ENCL: CO

SUB CODE: AI

NO REF SOV. OOL

OTHER 003

Card 2/2

ZOLOTAREV, P.P.; NIKOLAYEVSKIY, V.N. (Moskva)

Propagation of stress and pressure jumps in a water-saturated soil. Izv. AN SSSR. Mekh. no.1:191-196 Ja-F '65.

(MIRA 18:5)

"APPROVED FOR RELEASE: 03/15/2001 CIA-

CIA-RDP86-00513R002065410005-8

ZOLOTAREV, P.P. (Moskva)

Propagation of sound waves in a gas-saturated porous medium with a rigid frame. Inzh.zhur. 4 no.1:111-120 '44. (MIRA 17:4)

1. Institut mekhaniki AN SSSR.

MAYOROV, V.V.; KAPLAN, B.L.; ZOLOTAREV, P.P.

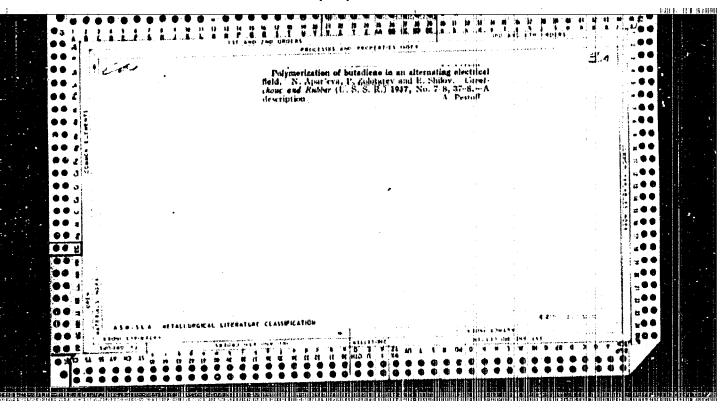
Approximate method for calculating inter-charge distances in group explosions. Izv. AN Turk. SSR. Ser. fiz.-tekh., khim. i geol. nauk no.4:56-61 '61. (MIRA 14:12)

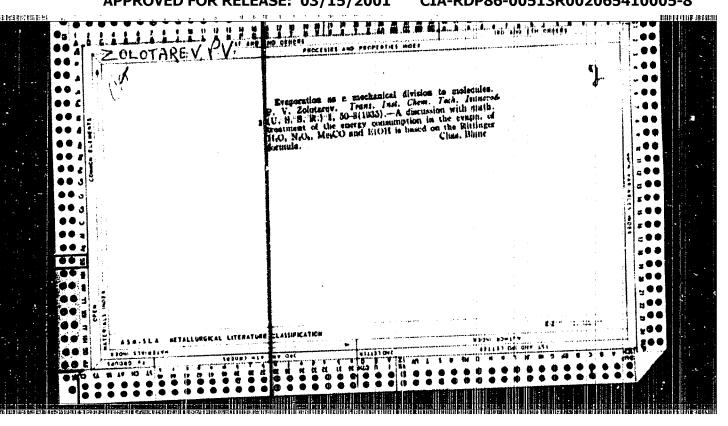
1. Vsesoyuznyy nauchno-issledovatel skiy institut geofizicheskikh metodov razvedki.

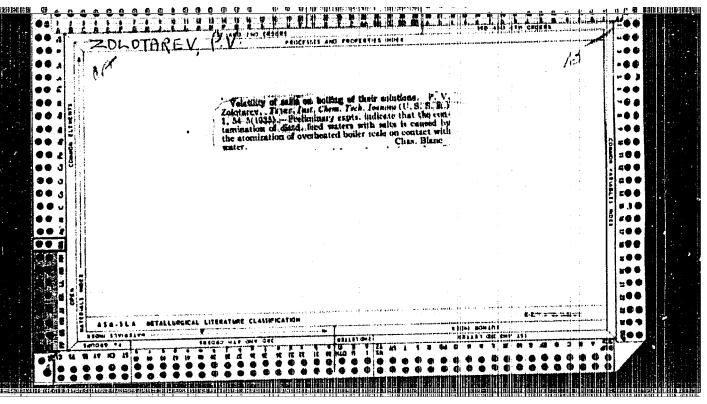
(Explosions)

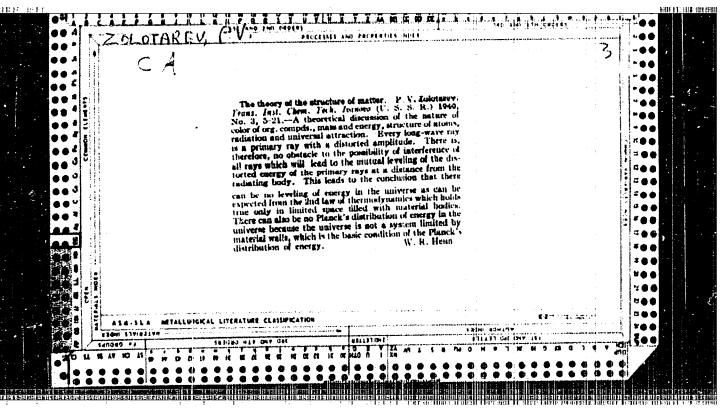
Equations for heat transfer in porcus media, Nauch.-tekh. sbor. po dob. nefti no.25:34-38 64. (MIRA 17:12)

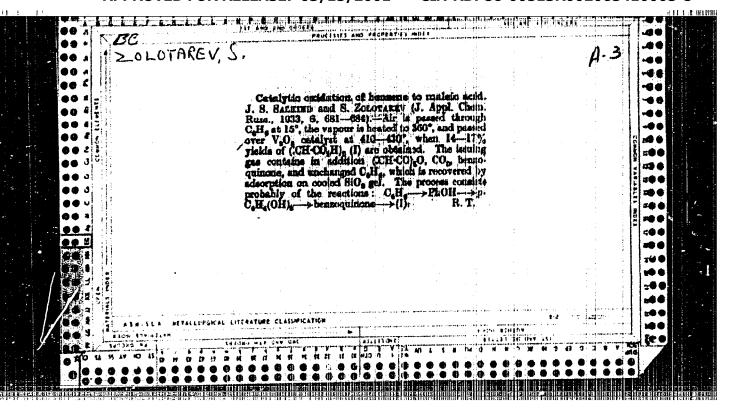
1. Vsesoyuznyy neftegazovyy nauchno-issledovateliskiy institut.



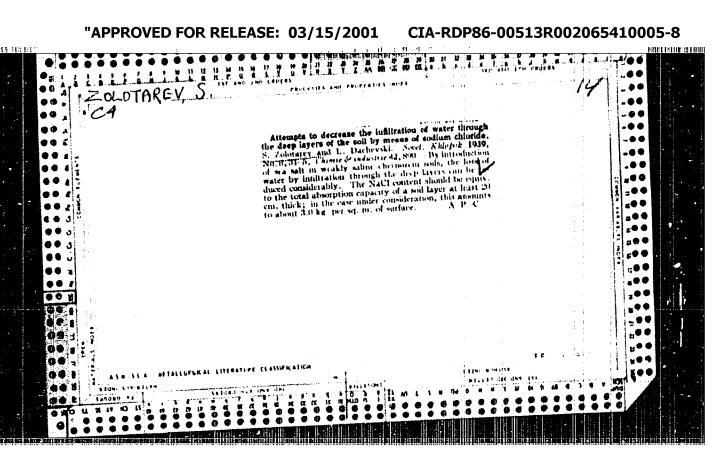








CIA-RDP86-00513R002065410005-8



ZOLOTAREV, S., kandidat tekhnicheskikh nauk.

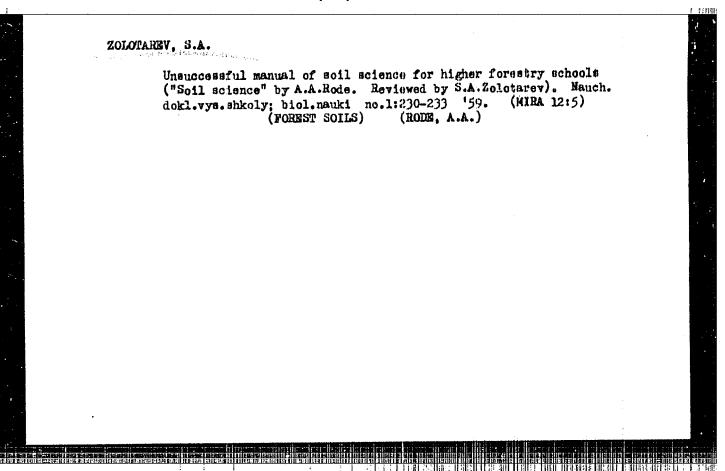
Problem of systematic arrangement of equipment in the grinding division of the nill. Muk.-elev.prom. 20 no.8:18-21 Ag '54. (MLRA 7:9)

1. Odesskiy tekhnologicheskiy institut imeni I.V.Stalina. (Grain milling machinery)

HACHIYANI, Arkadiy Ivanovich; ZOLOTAREV, S.A., red.; KATDALOVA, M.D., tekhn.red.

[Soils in agricultural regions of the Far East] Fochyy semledel'cheskikh raionov Dal'nego Vostoka. [Khabarovsk] Khabarovskoe knizhnoe isd-vo, 1954. 165 p.

(Soviet Far East-Soils)



ZOLOTAREV, S.A., doktor sel'skohozynystvennykh nauk, prof.

Genesis and classification of grey forest soils. Neuch. trudy
UASHN 10:189-199 '60.

(Forest soils)

ZOLOTAREV, S. A.

Forest Soils - Siberia, Castern

Influence of principal far East conifer trees on the soil. Pochvovedenie No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Unclassified.

ZOLOTAREV, S.A. [Zolotar'ov, S.O.]; BELAYA, O.P. [Bielaia, O.P.]

Composition of the silty fraction of the grey wood soils of the Ukrainian S.S.R. Dop. AN URSR no. 6:794-797 '64.

(MIRA 17:9)

1. Institut geologicheskikh nauk AN UkrSSR. Predstavleno akademikom AN UkrSSR V.G.Bondarchukom [Bondarchuk, V.H.].

ZOLOTAREV, Sergey Aleksandrovich, prof.; ANTONOVA, N.H., red.; TRUKHINA, O.N., tekhn. red.

[Forests and soils of the Far East] Lesa i pochvy Dal'nego Vostoka. Moskva, Izd-vo sel'khoz.lit-ry zhurnalov i plakatov, 1962. 168 p. (MIRA 15:5)

(Soviet Far East-Forest soils)

20IOTAREV, S. M.

BARER, G.O.; BELETSKIY, V.Ya.; VORONKOV, P.I.; DEMILIOV, P.G.; EXTADEIO, A.M.;

DOMBROWSKII, G.D.; ZOLOTAREV, B.M.; KRAVCHENKO, I.K.; PLATONOV, P.M.;

PARTH ENO, A.V.; UGOLIK, B.J.

V. IA. Girshson, Muk.-elev. prom. 23 no.4:23 ap '57. (MIRA 10:5)

(Girshson, Vasilii IAkovlevich, 1880-1957)

DZYADZIO, A. M.; ZOLOTAGEV, J. M.

Flour Mills

Designing mills. G. M. Levlatin. Reviewed by A. M. Dzyrdzio, G. M. Zolotarev. Sov. kniga No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

ZOLOTAREV, S.M.

Production of corn meal in the starch and molasses industry.

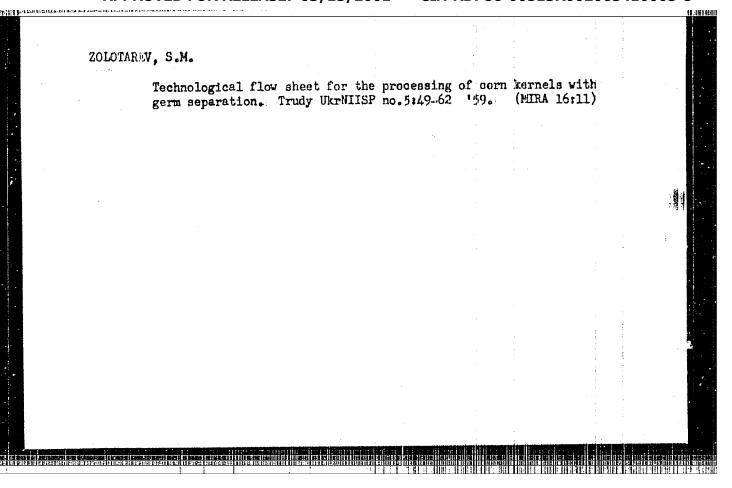
Sakh.prom. 37 no.7:66-71 Jl '63. (MIRA 16:7)

1. Odesskiy tekhnologicheskiy institut imeni M.V.Lononosova. (Corn meal)

ZOLOTAREV, S.M.; ZABRODSKIY, A.G.; POLOZHISHNIK, A.F.

Separation of corn germs processed in the fermentation industry. Spirt. prom. 28 no.7:20-26 '62. (MIRA 17:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut spirtovoy i likero-vodochnoy promyshlennosti (for Zolotarev, Zabrodskiy). 2. Odesskiy tekhnologicheskiy institut (for Polozhishnik).



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- 1. DZIADZIO, A. M., ZOICTAREV. J. F.
- 2. VIIR (600)
- 4. Leviatin, G. M.
- 7. Designing mills. G. H. Levyatin. Reviewed by A. M. Dziadzio, S. M. Zolotarev. Sov. kniga no. 3, 1953.

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